**Before the**
**FEDERAL COMMUNICATIONS COMMISSION**
**Washington, D.C. 20554**

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| In the Matter of | ) | |
| | ) | |
| IP-Enabled Services | ) | WC Docket No. 04-36 |

# COMMENTS OF THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION

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Dated: May 28, 2004

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## I. Introduction

The Computer & Communications Industry Association represents a diverse group of companies including software, hardware and communications companies with direct interest in the development of IP-Enabled services. Together, our member companies employ more than one million people and generate revenues in excess of $200 billion annually. Since Congress and the Federal Communications Commission together regulate telecommunications, our members need to know whether – and if so, how – the Commission will regulate software and services that use Voice over Internet Protocol (VoIP).

Hardware makers, for instance, need to know which interfaces they should use, and the capabilities they must build into their products in order to comply with prospective government regulations. Software makers want assurance that the recent decision in the Pulver.com case[1] reflects more than a momentary trend. Internet service and content providers want to know that their networks will not be subject to the same kind of detailed regulation that envelops telecommunications today.

IP telephony can be divided into four separate categories: computer-to-computer, computer-to-telephone, telephone-to-computer, and telephone-to-telephone.

- **Computer-to-computer** - Several companies offer free or low-cost software that can be used for this type of VoIP. Often used with handsets that resemble traditional telephones, computer-to-computer calls require an Internet connection but are otherwise free of charge, no matter the distance.

[1] *In the Matter of Petition for Declaratory Ruling that pulver.com's Free World Dialup is neither Telecommunications Nor a Telecommunications Service, WC Docket No. 03-45 (February 12, 2004)*

- **Computer-to-telephone** - Like computer-to-computer calling, calling a telephone from a PC requires a software client. The software is typically free, but calls are generally not.

- **Telephone-to-computer** - A few companies provide special numbers or calling cards that permit ordinary telephone customer to call to computer users. Such calls are normally much cheaper than a traditional long-distance call.

- **Telephone-to-telephone** - Users call gateways that link them first to the Internet, and then another telephone. Although customers must first dial a special number to be connected, rates are typically much lower than standard long distance.

Even a cursory glance at the categories above reveals that none fit neatly into the current regulatory structure. Nonetheless, VoIP's rapidly growing capabilities suggest that large numbers of businesses and consumers will drop their circuit-switched services for unregulated VoIP, thereby imperiling the achievement of certain goals inherent to regulation.

There may be a temptation to move present regulation into the new world of VoIP. The Commission has thus far resisted that temptation, and should continue doing so. As we outline below, current regulatory structures were designed around a variety of technical and economic features that simply do not exist in the VoIP sector. As such, achieving the goals of such regulation will require entirely new means. The Commission, rather, needs to continue its hands-off approach to the Internet and let this key Internet application evolve. Such an approach will avoid distorting a marketplace that is producing remarkable growth, innovation and consumer benefits.

## II. Major VoIP Providers

Voice over IP comes in many forms, some closely resembling traditional phone service from the user's point of view. Several companies are now offering business services that let enterprises dispense with expensive PBX phone systems (private branch exchange) and obtain switching features for multiple offices, all through an IP connection. Vonage, a private start-up company based in New Jersey, has garnered substantial media attention for its consumer-oriented IP voice product, which offers unlimited long distance calling throughout the United States and Canada for less than $35 a month. But Voice over IP is far broader – and includes services and applications different from those that resemble traditional telephony.

Today, consumers can buy pocketsize personal digital assistants that allow voice communications over a WiFi connection to the Internet. Web cams that sell for less than $100 broadcast real time video and audio signals across the Internet. The Yahoo! Messenger service let friends exchange not only text messages but also audio messages. Mobile phone companies offer a variety of "push-to-talk" services via IP. And leading online game consoles like the Microsoft X-Box and Sony Playstation come equipped with headphones that allow real-time voice communication by players in different locations, through broadband Internet connections to the home. Each of these embeds IP voice into the offering and therefore may be labeled Voice over IP. But all are different from traditional phone service, and do not fit into the old classifications of the circuit-switched world.

## III. VoIP Technologies and Business Models

VoIP follows the classic "three layer" model of physical Internet infrastructure: physical or transport layer, code layer, and content layer. The physical layer allows for transport but is a "dumb" layer incapable of distinguishing among providers or content. The code layer is essentially the operating system of the Internet, and lets various systems communicate among themselves. The content layer, in turn, is the information passed from one point to another. This is where VoIP resides.

It is not part of the physical, nor code of the Internet; it is merely an application. A VoIP subscriber must still purchase a broadband connection to the Internet, either though a separate ISP or a bundled offering from the VoIP provider. Thus, VoIP software developers, such as Pulver[2] and Vonage,[3] have no control over the use of the Internet connection.

Classifying a service like VoIP is a difficult task. Voice over IP is an application, but it will over time replace the current switched network with a service that looks and feels much the same as the plain old telephone service (POTS). Yet, the capabilities of VoIP far exceed those of the current network. The information that could flow simultaneously with voice communications is seemingly endless: application providers will provide IP-enabled services to countless new devices. Companies are testing television signal over VoIP. None of this, to borrow a phrase, is exactly your father's telephone service.

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[2] *See* www.pulver.com

[3] *See* www.vonage.com

The powerful and versatile service, now known as VoIP, must be classified as an information service for now. The Commission will have a reason to consider regulating VoIP providers only if they become as widely used and as *relied upon* as telecommunications services, and there is a credible threat to an open competitive marketplace.

## IV. VoIP threatens the entire edifice of telecom regulation

Issues surrounding VoIP fundamentally deal with a regulatory structure based on a long-standing regulatory dichotomy between basic telecom services and enhanced information services.

The distinction between the two makes sense in the context of a single, unitary telephone monopoly and numerous competitors who must have access to that network. Telecommunications Services, in the words of the 1996 Telecommunications Act, "the offering of telecommunications for a fee directly to the public, or such classes of users as to be effectively available directly to the public, regardless of the facilities used."[4] Regulation of the telephone network has always followed from the determination that telephony was either a natural monopoly or, later, needed government intervention to assure the entrance and survival of new competitors.

Information services have remained unregulated partly because no single company controls them. These distinctions have worked well for more than twenty years, but the reasoning that produced them is rapidly aging. Technological convergence between packet-switched TCP/IP-based networks and circuit switched TDM networks is

[4] 47 U.S.C. § 153(46) (2002).

blurring the difference between basic telecom services and enhanced information services.[5]

Few observers still claim that we can draw a bright line between telephony and data services. Because voice communications are increasingly being carried as a customer premises equipment (CPE) driven application over networks based on Internet protocols, we can no longer think of data and voice networks as entirely separate. The emergence of new competitors that barely touch the conventional public, switched network – if they touch it at all – is leading to numerous difficulties. The new breed of voice services defies simple categorization and, in the long run, threatens categories of regulation that presumed a relatively static network structure.

Yet, this convergence of data, voice and video is creating a remarkable array of new products and services, almost all of which represent a boon to industry and consumers alike. It behooves the Commission to embrace this transition while planning for what will likely be a significant reduction in regulation over the sector.

Voice over Internet (VoIP), also known as Voice on the Net (VON), transmits voice conversations via IP over the Internet and other TCP/IP networks, both public and private. IP networks are more efficient than [current] legacy circuit-switch networks because, among other things, they use a routing scheme that does not require a dedicated transmission path.

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[5] In 1982, the Court of Appeals for the D.C. Circuit affirmed Computer II's distinction between basic and enhanced telecommunications services. *Computer & Communications Industry Ass'n. v. FCC, 693 F.2d 198 (D.C. Cir. 1982).*

The ability to move voice across what were once data-only networks promises significant gains in efficiency, lower cost and greater communications capability. VoIP will save businesses and consumers money, since VoIP requires only a single, highly efficient network rather than separate infrastructures for both data and voice.

## V. Title II regulation is an outgrowth of 1930s market conditions

The Commission does not "pick winners or losers,"[6] but it has promoted certain technologies from time to time. Under terms of the 1996 Telecommunications Act, for instance, the Commission must promote development of "advanced services ... without regard to any transmission media or technology."[7] Under this language alone, we believe that the Commission must avoid regulation of the sort that has dominated telephony since passage of the Communications Act of 1934.

The Commission has fortunately shown little inclination to replicate its experience with wireline communications. The Commission declined to do anything to hamper its development when it declined to grant a petition to treat software providers offering voice applications for Internet users as telecommunications common carriers.

The marketplace has changed since 1998. Today, VoIP is clearly a competitor to conventional phone service in some situations. The Commission has also found the phone-to phone variant of IP telephony is the one that most closely resembles current telecommunications services. The Commission, therefore, has already signaled its willingness to assure that all have access to phone-to-phone type of VoIP technology,

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[6] *See* "The Stevens Report" from FCC to Congress 10 April 1988.

[7] 47 U.S.C. § 157(c), as amended by *Act of Jan. 8, 2002,* Pub. L. No 107-110,115 Stat.2093.

should it become the dominant form of telephone service. If and when that day comes, it seems all but certain that Congress will demand that:

- All Americans can use VoIP at accessible rates;
- Emergency services remain accessible via E911;
- Law enforcement retains its ability to conduct reasonable electronic surveillance (CALEA);
- Those with hearing and speech disabilities can still use services to communicate with the hearing and speaking world.;
- Companies that must route calls over conventional telephone networks are compensated for use of their equipment.

These goals are unquestionably important. Regulation of VoIP, however, could do more harm than good in achieving them. As the Commission is aware, VoIP applications are in a state of extreme flux; no more than two years ago, most observers thought VoIP was little more than a hobby years away from practical use. Given the fluidity of current conditions, it behooves the Commission to continue to monitor, rather than regulate, this extremely promising sector.

The Free World Dialup (FWD)[8] ruling is important to the future of VoIP. Since voice packets, like data packets, travel randomly though the Internet to their destination, they are by their very nature interstate and should not be subject to regulation by 50 separate states. The apparent determination that VoIP will not be subject to state regulation, while important unto itself, should encourage VoIP providers to stay in the

[8] *In the Matter of Petition for Declaratory Ruling that pulver.com's Free World Dialup is neither Telecommunications Nor a Telecommunications Service, WC Docket No. 03-45 (February 12, 2004)*

United States. A move towards state regulation, in our view, would encourage VoIP providers to move offshore and into other countries where regulation is less if not non-existent.

To the extent that the longstanding U.S. policy of "hands off the Internet," has been largely emulated by many other governments it has been an enormous success. VoIP in particular is a force for increased competition, a platform for innovation, and a driver of broadband deployment. The best public policy is to refrain from applying traditional telecom regulation to VoIP and to affirmatively create a national policy vision that ensures that traditional telecom regulation does not apply to Internet voice communications throughout the country**.**

## VI. Regulatory treatment of Internet technologies

The debate over VoIP is founded in the Commission's 1980 *Computer II* decision,[9] which aimed to foster growth of new technologies via minimal regulation. Through this Order, the Commission defined "basic" services and "enhanced" services.[10] Basic services were defined as "the core of the public switched telephone network traditionally subject to regulation, the 'common carrier offering of transmission capacity for the movement of information.'"[11] Enhanced service was "any offering over the

[9] *In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)* 77 F.C.C.2d 384 (1980).

[10] *Id.* at *418-19.*

[11] *Id.* at 419.

telecommunications network, which is more than a basic transmission service."[12] Thus, the Commission declared the traditional switched network basic and subject to regulation, and Internet service "enhanced." The Commission justified these interpretations via the Communications Act of 1934, which gave it the authority to regulate "common carriers."[13]

VoIP is currently treated as an "enhanced" or "information" service and is therefore free from regulation. In a report to Congress on April 10, 1988,[14] the Commission stated it planned to continue evaluating regulation of VoIP services on a "case-by-case basis."[15] In February 2004, the Commission granted a petition by Pulver.com and FWD, stating that the computer-to-computer VoIP applications that they offered where neither "telecommunications" or "telecommunications services."[16]

The roots of each of these rulings lay in *Computer II*[17] as well as the Telecommunications Act of 1996. The Act codified the traditional basic vs. enhanced dichotomy by further distinguishing between "telecommunications services" and "information services."

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[12] *Id.* at 420.

[13] *Id.* at 416 (quoting 47 U.S.C. § 151); *See generally* 47 U.S.C. § 201.

[14] *See* "The Stevens Report"

[15] *Id.*

[16] *In the Matter of Petition for Declaratory Ruling that pulver.com's Free World Dialup is neither Telecommunications Nor a Telecommunications Service, WC Docket No. 03-45 (February 12, 2004)*

[17] *In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)* 77 F.C.C.2d 384 (1980).

According to the Act, an information service is:

> "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunication service"[18]

A telecommunications service is:

> "the offering of telecommunications for a fee directly to the public, or such classes of users as to be effectively available directly to the public, regardless of the facilities used."[19]

VoIP blurs these distinctions, rendering current regulatory structures completely unworkable. The Commission filed its last major report to Congress on April 10, 1998. It found then that VoIP, except when used as a mere conduit between two analog telephones, failed to meet the definition of "telecommunications."

"Companies that only provide software and hardware installed at customer premises do not fall within this category, because they do not transmit information," the Commission wrote. The Commission went on to say: "These providers are analogous to PBX vendors, in that they offer CPE that enables end users to engage in telecommunications by purchasing local exchange and inter-exchange service from carriers. These CPE providers do not, however, transport any traffic themselves." The same, in our view, holds true today.

[18] 47 U.S.C. § 153(20).

[19] 47 U.S.C. § 153(46) (2002).

## VII. VoIP providers should not be regulated as phone companies with significant market power.

A legitimate desire to restrain monopoly power has driven telecommunications regulation since its earliest days, and was the driving force behind the1934 Act. The Act required American Telephone & Telegraph and later all carriers, to provide service to all customers at "just and reasonable" rates.[20]

The tariff related provisions of sections 203-205 empowered the FCC to enforce this requirement. These sections allowed the Commission to suspend, reject and even replace tariffs containing unreasonable rates. While all carriers are required to file tariffs only the incumbent carriers (ILEC) are subject to these formalized rate regulations. The FCC has held that only carriers that have market power, defined loosely as the ability to raise prices above competitive levels, should be subject to rate regulation. The 1996 Act was meant to put an end to monopolies within the telecommunications industry.

The 1996 Act broadly preempts most state law to the extent that those laws explicitly bar competitive entry.[21] The Act also authorizes cable companies to compete against local phone companies and clears the way for broadband over power line.[22] To foster greater competition in the wireline segment, Congress forced incumbent carriers to offer competitors "access to network elements on an unbundled basis at any technically

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[20] 47 U.S.C. § 201(a), (b).

[21] 47 U.S.C. § 253(d)

[22] Telecommunications Act of 1996 §302(b)(1) and §402(b)(2)(A).

feasible point" and "in a manner that allows requesting carriers to combine such elements."[23]

The 1996 Act was a realization that regulations could be harmful as well as helpful. Congress therefore, directed the Commission to forebear from regulating, consistent with the public interest, wherever such regulation is not necessary to ensure the charges are just and reasonable or to protect consumers.[24] This time there is no need for the Commission to regulate this emerging technology to protect consumers. A provider of a VoIP service has no need to own or build the infrastructure on which the service is delivered. Since there are no historic or even nascent VoIP monopolies, there is no basis for regulation of any provider today. Rather, the Commission can rely, as it has in the interexchange and other markets, on competition to meet the Act's objectives of assuring just, reasonable and non-discriminatory rates and practices. In short, the Commission should forebear from regulating VoIP unless and until it determines that dormant players and anticompetitive practices undermine the openness and competitiveness of the market.

VoIP is an application with implications that go well beyond voice. Real-time audio, video conferencing as well as telephony travel over VoIP, and are redefining the once-staid world of electronic communications. In short, IP destroys the old distinctions between "voice" and "data" that are a standard part of Public Switched Telephone Network (PSTN) thinking. Indeed, because the information associated with any particular application is broken down into bits and does not take its analog form (i.e. sound, text or pictures) until it is reassembled at the terminating end, it is inappropriate to

[23] 47 U.S.C. § 251(c)(3)

[24] 47 U.S.C. § 160

assign it to any particular service classification at any point other than origin or destination. An IP network provider, for example, can be carrying real-time two-way voice bits without itself offering voice service to any end- user customer.

## VIII. VoIP and the future of Regulation

### A. Universal Service

Universal Service has expanded from Congress' simple decision to wire the countryside into a wide-ranging commitment that assures all Americans affordable access to telecommunications.

The 1996 Telecommunications Act added new services to those already required "at just, reasonable and affordable rates," including access to "advanced" or Internet services. Schools, rural health care facilities and libraries were to receive such services at discounted rates.[25]

Since the Commission is already engaged in a thorough review of universal service, there is little need to examine every facet of this important national policy. Nonetheless, we feel it is important to note that Universal service as it now exists is a poor fit for VoIP.

It is outmoded because:

- it assumes that basic communications are carried out over a switched network;
- it treats long-distance calls as luxuries that should subsidize "basic" local calling;
- telecom services remain compartmentalized from information services, which are increasingly important to all of society and inherent to VoIP.

[25] 47 USC 254(b)

Universal service does not mean a PC in every home. Nonetheless, if the market is driving telephonic infrastructure towards VoIP that necessarily means that it is also driving towards broadband access.

Rather than paying for outdated, switched circuit architecture, the Universal Service Fund should be fostering the growth of more efficient services. We therefore urge the Commission to examine closely the option of using universal service funds to pay for broadband service in a technologically neutral manner. Doing otherwise will waste ratepayer money on outmoded infrastructure, artificially prolong use of inefficient circuit-switched networks, and deny increasingly essential communications capabilities to those who may most benefit from them.

### B. Security and Reliability

Reliability has been the touchstone of the American telephone network since its earliest days. No other country on earth, the saying went, has phone service to match America's. Such statements may or may not be true today, but it's clear that Americans expect – and receive –superb reliability from their phones.

Reliability is important for routine matters, and obviously more so in emergencies. The same is currently true for VoIP. But VoIP travels over an infrastructure that in some ways is less reliable than the switched public telephone network. For while the Internet famously stayed up during the attacks of Sept. 11, 2001, the chances that any given emergency call would make it to its destination over the unbounded Internet are lower than those found at the average US Central Office.

Since PC-to-PC and hybrid VoIP services run over Internet protocols, we have reason to believe they may not be up to the "five nines" reliability that we expect of the conventional E911 system. Yet, even if the Internet were as reliable as the nation's phone system, we would still face problems of precise location determination for E911, as well as continuity of power issues.

Location information is difficult with VoIP in part because there is no fixed, physical aspect to the VoIP telephone number or other unique identifier used. As of this writing, the most sophisticated solutions involve simple subscriber billing records and GPS type systems. Each of these approaches has its limitations. Subscriber information is useful for E911 only to the degree that the subscriber keeps his phone in one place. Since one of VoIP's main attractions is that handsets can be carried and used anywhere, such a limitation is unattractive.

Likewise. GPS systems are useful for mobile handsets, but may not be helpful for users who are in apartment buildings or other places where GPS resolution is too limited to make a precise determination of a person's location.

Given these limitations, it is clear that VoIP is not yet to the point that it can reasonably comply with present-day quality of service obligations. Likewise, since most VoIP subscribers have some kind of backup communications system, few VoIP subscribers are in fact exposed to a less-than-perfect E911 system.

At some point, VoIP may become dominant enough, with sufficient issues left unaddressed, that regulation might be required. Nonetheless, we believe such a day is at least several years in the future. In the interim, we urge the Commission to forebear from

regulating in this sector and permit the private sector to arrive at a more satisfactory solutions to the problems of reliability and emergency location services.

### C. Access Charges

Long distance companies rely on the loops, switches, and transport facilities of local telephone companies for access to their customers. As a result, local telephone companies recover a portion of their costs from long distance companies accessing their networks. The manner in which these access charges have been assessed and the proportion of the costs they have recovered have varied considerably over time. Interstate access charges paid by long-distance carriers have steadily decreased during the past decade, as price-cap regulation has slowly but surely diminished them. Just a few years ago they accounted for almost half the cost of a typical long-distance call. [26]

VoIP dramatically changes the technical infrastructure of the nation's communications networks. Previous distinctions between local and long distance will no longer make sense. The subsidies that have previously been derived from long distance to fund local calls is no longer necessary. Every call is essentially a local call, much the same as every call is a long distance call. Distinctions between the two no longer make sense, either from a technology viewpoint or from an access charge advantage point.

VoIP has an inherently lower cost structure than does the circuit switched network. The market, therefore, will pressure incumbents to replace the present telephone network with a VoIP infrastructure. Such a transition will place severe

[26] Access charges averaged $0.17 per minute in 1985. $0.08 in 1990, $0.07 in 1995, $0.03 in 2000 and less than $0.02 in 2002 *See* FCC, Trends in Telephone Service, at Table 1.2 (August 2002)

pressures on the current universal service mechanisms. Faced with such a radical change in the marketplace, the Commission's ongoing effort to examine universal service anew become increasing important, and it will be necessary to reconsider both the services it should provide as well as the funding mechanisms for them.

### D. Access to facilities

Since VoIP is an Internet service, most regulated access to unbundled network elements becomes unnecessary. The consumer is already receiving his Internet connection from a broadband provider, such as a digital subscriber line (DSL) service or thought their local cable company. The type of connection does not make a difference to the VoIP provider since it is merely providing an application that flows on top of the Internet. Since many subscribers will continue to have broadband access through the local loop, but not have a universal need to other parts of the unbundled network, the Commission will have to reexamine its framework for access and streamline accordingly.

Since VoIP needs only a fraction of the resources dedicated to conventional telecommunications, there should be little beyond the local loop itself that might need regulation in the future. At the same time, each year promises more competition to the local loop. Cable broadband deployment is still greater than DSL, while wireless, power line and satellite solutions continue to advance.

## IX. State Regulation

States have the authority to regulate intrastate commerce and have therefore traditionally enjoyed a hand in regulating the local phone companies. Nonetheless, the

1996 Act gave the Commission authority to preempt most of the role state Public Utility Commissions (PUCs) enjoyed in regulating phone companies.[27] The Commission has used this authority on a number of occasions. It first applied this authority in *Classic Telephone*.[28] The Commission initially noted in *Classic Telephone* that section 253 of the Act was an express statutory grant of preemption power from Congress: The "plain language of section 253 does not exempt from the scope of federal preemption purely local matters of franchising authority."[29] The Communications Act, as amended by the 1996 Act, contains other express preemptions of state authority over many other communications services, including Internet and data services.[30] Together with section 601(c) of the 1996 Act, which states that the "Act and the amendments made by this Act shall not be construed to modify, impair, or supersede Federal, state, or local law unless expressly so provided in such Act or amendments",[31] these express grants of federal preemption power provide specific, bright-line guidance for certain issues, unlike the nebulous factors test of section 253. The Commission has used this power in the public interest on numerous occasions. The Commission should use it again in the context of VoIP.

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[27] 47 U.S.C. § 253(a)

[28] Classic Telephone, Inc. Petition for Preemption, Declaratory Ruling and Injunctive Relief, Memorandum Opinion and Order, 11 F.C.C. Rec. 13,082 (1996) (hereinafter *Classic Telephone).*

[29] *Id.* at 13,094-13095.

[30] 47 U.S.C. § 157.

[31] *Id. See* § 3.8.

VoIP is inherently interstate. There is no way to know with certainty how the given voice packets will traverse the backbone of the Internet. As such, it is clear that under the Commerce Clause of the U.S. Constitution, VoIP is under the sole jurisdiction of the federal government. The Commission has historically regulated in tandem with states where interests are joint, but alone when interest are clearly interstate. State regulation of VoIP providers would subject a new industry to the varying standards of 50 separate states in addition to those set down here. Such treatment would encourage VoIP providers to move offshore, free from regulatory overload.

In order to protect this Internet service and make sure it is universally available to all citizens, it is important that the Commission preempt any attempts at state regulation. Congress and the Commission should have sole authority over VoIP.

## X. Conclusion

As an matter of technology, VoIP is an information service under Computer II and the Telecommunications Act of 1996. Its dependence on the Internet leaves little doubt that such is the case. Yet, it is clear that VoIP in its best forms today largely substitutes for conventional telecommunications, the suppliers of which must submit to a variety of regulations designed to serve the public interest.

Telecommunications regulation has ensured greater competition in a area that was once occupied by a single dominant carrier. It has assured that all Americans have access to reasonably priced communications services, and that those services are as available as is practicable. Regulation has ensured emergency communications that can be relied upon. It has united and effectively expanded the habitable area of our country, and given

law enforcement the ability to intercept communications for investigative purposes when supervised by a court of law. But, VoIP drastically changes the landscape of communications and fundamentally challenges the old paradigms.

The Commission seeks to preserve the laudable social policy goals mandated in legacy telecommunication regulation. Doing so will require little, if any, action on the part of the Commission. Consumers and businesses will move to VoIP only if it delivers all or substantially all of the features they receive from switched telephony today. VoIP, in turn, can deliver benefits that were once guaranteed by regulation, but it cannot do so efficiently – if at all – if the current regulatory regime is transferred onto it.

We can assume that the VoIP transition is nearly upon us. We can forecast a collapse of the present Universal Service Fund as it now stands, and assume that the public switched network will soon wither away. Yet, even if we do all of these things, we cannot change the fact that neither the technology nor economics of VoIP fits the existing regulatory structure. We believe that all Americans will soon need broadband and VoIP in order to function as full participants in our national democracy. The Commission, we trust, will reach the same conclusion. Innovation that springs from the market, coupled with a light touch from government, will fill that need best.

Respectfully submitted,

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